Application No. 10/807,187

Attorney Docket No. 02887.0270-00

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph bridging pages 1 and 2 of the Specification as follows:

Even when the method disclosed in Japanese Patent Laid-Open No. 5-190132 is used, however, it could happen that an image is misjudged as being that of a pattern image that is in focus, even though it is not actually in focus, so that erroneous check results are output and thus the precision of the focusing is not always considered satisfactory. In addition, the line profile could become indistinct if the edge of the pattern is not orthogonal to the scanning direction of the electron beam, and focusing by a prior-art method could make it difficult to detect the correct focal position, for reasons such as a momentary change due to charging or contamination of a sample. It is also considered impossible to reproduce the p8attern pattern images because of factors such as the stability of the power source, when setting parameters of the electron beam optical system to the detected values (usually the excitation current of the objective lens) by the focusing process again.

Please amend the paragraph at page 10, lines 7 to 12, of the Specification as follows:

A schematic block diagram of the configuration of an embodiment of a pattern measuring apparatus in accordance with the present invention is shown in FIG. 1. A

pattern measuring apparatus 10 shown in this figure comprises a workstation (EWS) 12, an image a processor 14, a memory MR2, and an output device 18.

Please amend the paragraph at page 19, lines 23 to 33, of the Specification as follows:

A graph of the relationship between the standardized correlation value Rn and focal distance, obtained by using the edge reference data RDa and RDb of FIGS. 16A and 16B to scan the pattern image of FIG. 14, is shown in FIG. 17. As is clear from FIG. 17, the edge reference data RDa gives a result that is similar to that of FIG. 15, but the edge reference data RDb forms a maximum value at a high correlation value, making it possible to detect the edge points with a good sensitivity from the pattern image at which a suitable focal distance was obtained for the edge lines for group [[2]] 4.

Please amend the Abstract of the Specification as follows:

A pattern measuring apparatus includes: a storage device which stores a plurality of pattern images of a pattern to be measured and edge reference data which is used as reference to detect the edge of the pattern within the pattern images and is configured of a plurality of pixels that are disposed so as to have an intensity gradient, the pattern images being obtained by an external imaging device at different focal distances; a calculator which scans the pattern image images of a pattern to be

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measured obtained at different focal distances, with the edge reference data used as a reference to detect an edge of the pattern, detects edge points of the pattern, and also calculates a characteristic quantity that expresses a correlation between the edge reference data and the detected edge points of the pattern; a determinator which determines an in-focus state that expresses the degree to which the focal position at which each pattern image is obtained conforms to a desired pattern edge, based on the calculated characteristic quantity; an image selector which selects the pattern image that conforms to measurement of the pattern from a plurality of the pattern images, in accordance with the determination result of the in-focus state determinator; and a measurer which processes the selected pattern image to measure the pattern.